

ABSTRACT OF THE DISCLOSURE

Apparatus and methods for signal search in a mobile communication system can process input signals in parallel. A signal searcher apparatus in a communication system can include a first sequential storage device and a second sequential storage device for respectively storing PN codes and input signals. The signal searcher can include a plurality of despreading devices that despread in parallel the input signals having I and Q components by respectively using the PN codes. In a case where the length of coherent accumulation is a plurality of the number of despreading devices, additional buffers store (e.g., temporarily) the accumulated despread signals each having I and Q components that are equal to the number of searched PN offsets. According to preferred embodiments of the present invention, pilot signals searching speed can be increased and/or the length of PN offset and coherent calculation can be increased.